Application No.: 10/763,333 Attorney Docket No. 0630-1942P
Art Unit 2879 Reply to September 7, 2005 Office Action

Page 4

## Amendments to the Claims

1. (Currently Amended) A color CRT having a panel of which outer surface is substantially flat and inner surface has a predetermined curvature and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface (U) of the panel is 4:3, a diagonal size (U) of the effective surface is 570mm ~ 700mm, and a following condition is satisfied:

 $-1.7168*Ln(U)+11.627 \le (Rh*Rv*Ro/U)*Tc \le -2.0131*Ln(U)+13.645$ 

wherein a value obtained by dividing an inner curvature radius Rx of the effective surface of the panel following a long axis (X) by a distance Lx of the effective surface of the panel following a 1.767\*long axis is Rh, a value obtained by dividing an inner curvature radius Ry of the effective surface of the panel following a short axis (Y) by a distance Ly of the effective surface following a 1.767\*short axis is Rv, a value obtained by dividing an inner curvature radius of the effective surface of the panel following a diagonal axis (D) by a distance Ld of the effective surface following 1.767\*diagonal axis is Ro, and the thickness of the center point of the panel 100 is Tc.

2. (Original) The CRT of claim 1, wherein a following condition is satisfied: 10mm≤Tc≤12.4mm.

Application No.: 10/763,333 Attorney Docket No. 0630-1942P Art Unit 2879

Reply to September 7, 2005 Office Action

Page 5

3. (Original) The CRT of claim 1, wherein a following condition is

satisfied:  $0.0875*Ln(U)-0.4192 \le OAH/U \le 0.0981*Ln(U)-0.4753$ , and a tube axis

directional distance from the center of the outer surface of the panel to a seal

edge line is OAH.

4. (Currently Amended) A color CRT having a panel of which outer

surface is substantially flat and inner surface has a predetermined curvature

and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface of the panel is 16:9, a

diagonal size (U) of the effective surface is 650mm ~ 760mm, a following

satisfied:  $-2.1319*Ln(U)+14.589 \le (Rh*Rv*Ro)/U)*Tc \le -2.1319*Ln(U)+14.589 \le -2.1319*Ln(U)+14.59*Ln(U)+14.59*Ln(U)+14.59*Ln(U)+14.59*Ln(U)+14.59*Ln(U)+14.59*Ln(U)+14.59*Ln(U)+14.59*Ln($ condition is

2.5462\*Ln(U)+17.414,

wherein a value obtained by dividing an inner curvature radius Rx of

the effective surface of the panel following a long axis (X) by a distance Lx of the

effective surface of the panel following a 1.767\*long axis is Rh, a value obtained

by dividing an inner curvature radius Ry of the effective surface of the panel

following a short axis (Y) by a distance Ly of the effective surface following a

1.767\*short axis is Rv, a value obtained by dividing an inner curvature radius

of the effective surface of the panel following a diagonal axis (D) by a distance

Application No.: 10/763,333 Attorney Docket No. 0630-1942P Art Unit 2879 Reply to September 7, 2005 Office Action

Page 6

Ld of the effective surface following 1.767\*diagonal axis is Ro, and the

thickness of the center point of the panel 100 is Tc.

5. (Original) The CRT of claim 4, wherein a following condition is

satisfied: 11mm≤Tc ≤13.4mm.

6. (Original) The CRT of claim 4, wherein a following condition is

satisfied:

 $-0.0567*Ln(U)+0.5119 \le OAH/U \le -0.0485*Ln(U)+0.4711$ , and a tube axis

directional distance from the center of the outer surface of the panel to a seal

edge line is OAH.

7. (Currently Amended) A color CRT having a panel of which outer

surface is substantially flat and inner surface has a predetermined curvature

and a funnel coupled to a rear side of the panel,

wherein an aspect ratio of an effective surface (U) of the panel is 4:3, a

diagonal size (LI) of the effective surface is 400mm ~ 500mm, and a following

condition is satisfied:

 $-0.8629*Ln(U)+5.6754 \le (Rh*Rv*Ro)/U*Tc \le -1.0547*Ln(U)+6.9366$ 

wherein a value obtained by dividing an inner curvature radius Rx of

the effective surface of the panel following a long axis (X) by a distance Lx of the

Application No.: 10/763,333 Attorney

Art Unit 2879

Attorney Docket No. 0630-1942P Reply to September 7, 2005 Office Action

Page 7

effective surface of the panel following a 1.767\*long axis is Rh, a value obtained

by dividing an inner curvature radius Ry of the effective surface of the panel

following a short axis (Y) by a distance Ly of the effective surface following a

1.767\*short axis is Rv, a value obtained by dividing an inner curvature radius

of the effective surface of the panel following a diagonal axis (D) by a distance

Ld of the effective surface following 1.767\*diagonal axis is Ro, and the

thickness of the center point of the panel 100 is Tc.

8. (Original) The CRT of claim 7, wherein a following condition is

satisfied: 9mm≤Tc≤11.5mm.

9. (Original) The CRT of claim 7, wherein a following condition is

satisfied: 0.096\*Ln(U)-0.4322≤OAH/U≤0.1052\*Ln(U)-0.4778, and a tube axis

directional distance from the center of the outer surface of the panel to a seal

edge line is OAH.

10. (Currently Amended) A color CRT having a panel of which outer

surface is substantially flat and inner surface has a predetermined curvature

and a funnel coupled to a rear side of the panel,

Application No.: 10/763,333 Attorney Docket No. 0630-1942P Art Unit 2879 Reply to September 7, 2005 Office Action

Page 8

wherein the center transmittance of an effective surface (U) of the panel

is 45% ~ 75%, a diagonal size of the effective surface is 650mm ~ 700mm, and

a following condition is satisfied:

 $-17.746*Ln(U)+116.49 \le (Rh*Rv*Ro)/U)*Tc \le -20.322*Ln(U)+133.45$ 

wherein a value obtained by dividing an inner curvature radius Rx of

the effective surface of the panel following a long axis (X) by a distance Lx of the

effective surface of the panel following a 1.767\*long axis is Rh, a value obtained

by dividing an inner curvature radius Ry of the effective surface of the panel

following a short axis (Y) by a distance Ly of the effective surface following a

1.767\*short axis is Rv, a value obtained by dividing an inner curvature radius

of the effective surface of the panel following a diagonal axis (D) by a distance

Ld of the effective surface following 1.767\*diagonal axis is Ro, and the

thickness of the center point of the panel 100 is Tc.

11. (Original) The CRT of claim 10, wherein the thickness at the edge

portion of the panel is equal to or smaller than 25mm.

12. (Original) The CRT of claim 10, wherein a following condition is

satisfied: 10mm ≤Tc≤13.4mm.